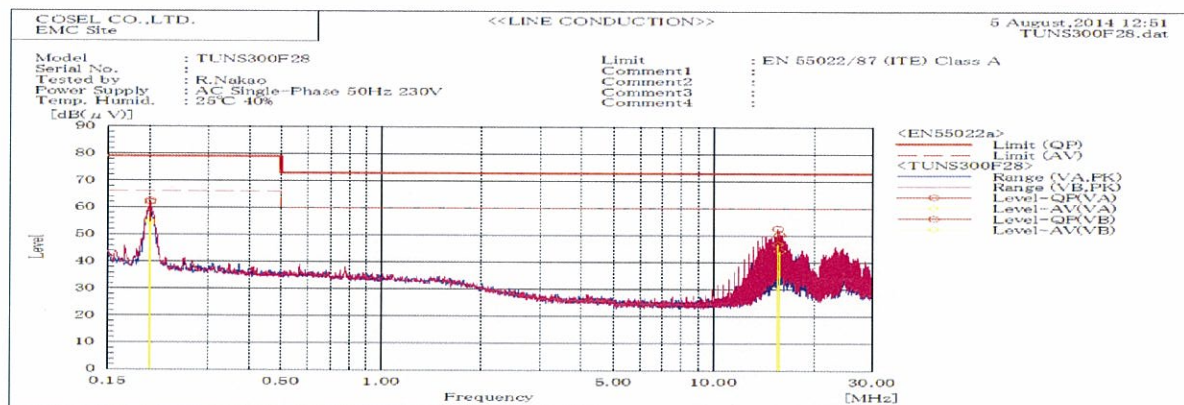
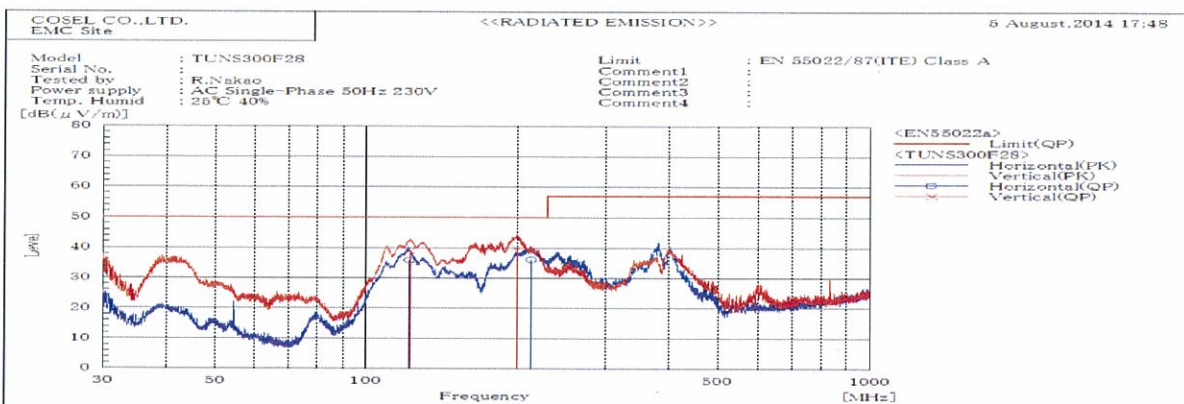


| DATA SHEET | | Date | 20-Aug-14 |
|------------|-------------------------------------|-----------|------------|
| Model | TUNS300F28 | Temp. | 25 degreeC |
| Test | EMI | Humid. | 40 %RH |
| | Line conduction & Radiated emission | Tested by | R.Nakao |



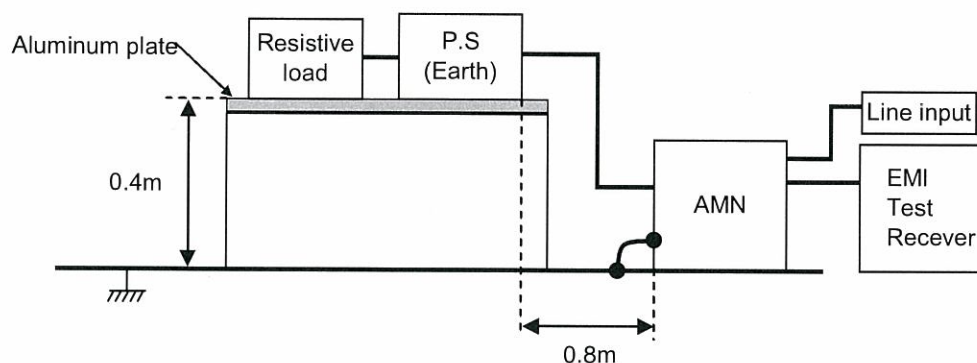
| Frequency MHz | Harm | Line Phase | Reading dB(μV) | | Factor dB | Level dB(μV) | | Limit dB(μV) | | Margin dB | | Pass/ Fail | Remark |
|------------------|------|---------------|-------------------|------|--------------|-----------------|------|-----------------|------|--------------|------|---------------|--------|
| | | | QP | AV | | QP | AV | QP | AV | QP | AV | | |
| 0.20062 | | VA | 41.7 | 34.4 | 20.2 | 61.9 | 54.6 | 79.0 | 66.0 | 17.1 | 11.4 | Pass | |
| 0.20117 | | VB | 42.3 | 34.8 | 20.2 | 62.5 | 55.0 | 79.0 | 66.0 | 16.5 | 11.0 | Pass | |
| 15.5021 | | VB | 31.6 | 25.9 | 21.0 | 52.6 | 46.9 | 73.0 | 60.0 | 20.4 | 13.1 | Pass | |
| 15.704 | | VA | 29.3 | 23.3 | 21.1 | 50.4 | 44.4 | 73.0 | 60.0 | 22.6 | 15.6 | Pass | |



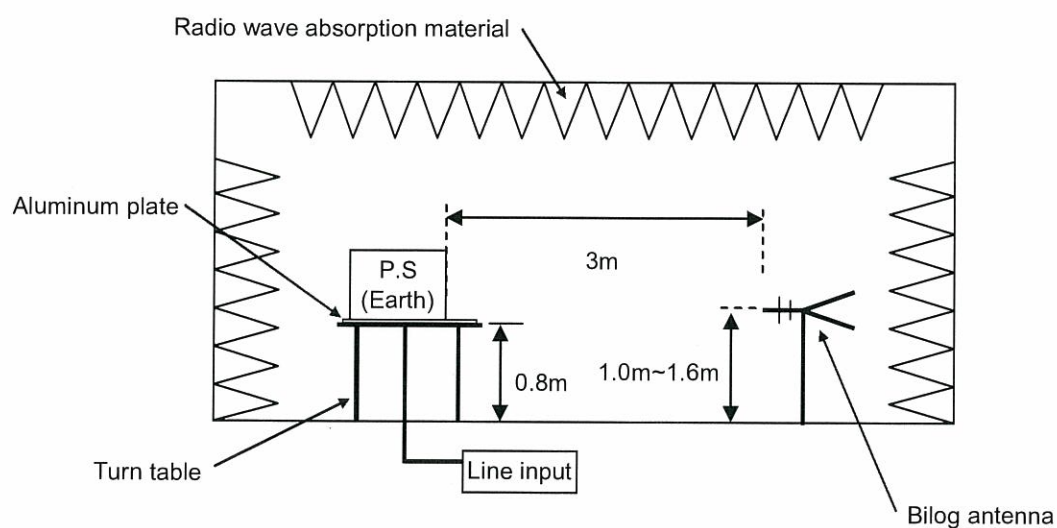
| Frequency MHz | Polarization | Stability | Reading dB(μV) | | Space Loss dB | Level dB(mW) | | Limit dB(mW) | Margin dB | Pass/Fail | Height cm | Angle deg | Remark |
|------------------|--------------|-----------|-------------------|-------|---------------------|-----------------|----|-----------------|--------------|-----------|--------------|--------------|--------|
| | | | QP | AV | | QP | AV | | | | | | |
| 121.61 | H | Stable | 55.1 | -19.3 | | 35.8 | | 50.0 | 14.2 | Pass | 158 | 333 | |
| 121.904 | V | Stable | 55.8 | -16.9 | | 38.9 | | 50.0 | 11.1 | Pass | 104 | 114 | |
| 199.441 | V | Stable | 55.6 | -15.7 | | 39.9 | | 50.0 | 10.1 | Pass | 104 | 1 | |
| 212.815 | H | Stable | 57.2 | -21.1 | | 36.1 | | 50.0 | 13.9 | Pass | 159 | 84 | |

| DATA SHEET | | Date | 20-Aug-14 |
|------------|--|-----------|------------|
| Model | Circuit used for measurement | Temp. | 25 degreeC |
| Test | EMI Line conduction & Radiated emission | Humid. | 40 %RH |
| | | Tested by | R.Nakao |

1. Line conduction



2. Radiated emission

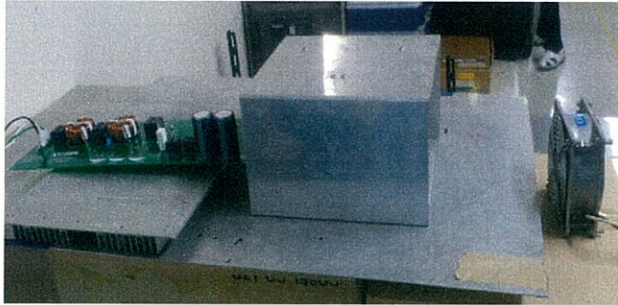


Test: EMI

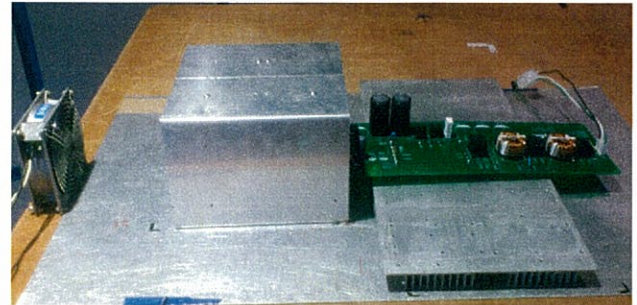
Model Name: TUNS300F Series

○ Photographs of Test Set-Up

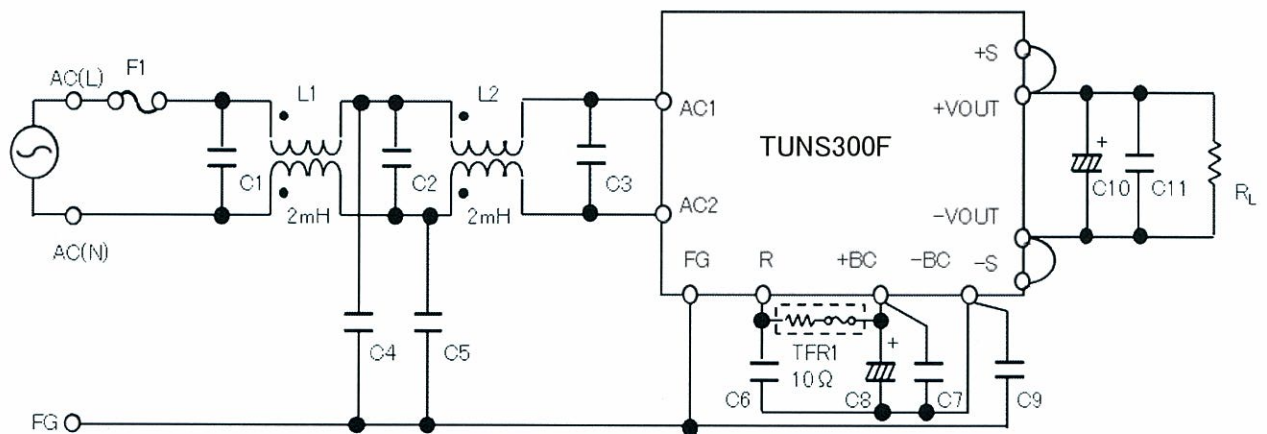
LINE CONDUCTION



RADIATED EMISSION



○ Test circuit



L1,L2 : SC-15-200(NEC TOKIN)

C1,C2 : 0.68 μ F 310V Film Capacitor \times 2

C3 : 1.0 μ F 310V Film Capacitor \times 2

C4,C5,C9 : 2200pF Ceramic Capacitor

C6,C7 : 0.68 μ F 450V Film Capacitor \times 2

C8 : 470 μ F 420V Electrolytic Capacitor

C10 : TUNS300F12 2200 μ F 25V Electrolytic Capacitor

TUNS300F28 1000 μ F 50V Electrolytic Capacitor

TUNS300F48 470 μ F 63V Electrolytic Capacitor

C11 : TUNS300F12 10 μ F Ceramic Capacitor

TUNS300F28 4.7 μ F Ceramic Capacitor

TUNS300F48 2.2 μ F Ceramic Capacitor